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THE IRRIGATION DEVELOPMENT  
ASSOCIATION *of* SOUTHERN  
.... ALBERTA ...



AN ADDRESS

By

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With Discussion by J. POWELSON and others.

At the Thirteenth Annual Convention of the  
Western Canada Irrigation Association  
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## Irrigation Development Association of Southern Alberta

I suppose it is because of the absence of our President, Mr. Marnoch, that I have been told to act as Acting President while he is gone. With this audience I do not think it necessary to say anything about the outlook of irrigation, nor is it necessary for me to tell you of the progress we have made in farming or how the country was settled. You are all familiar with that history.

In Southern Alberta was developed an irrigation system under the A. R. & I. I think the factor that has added more to the development of the Irrigation Association has been the success and growth of this irrigation project, lying as it does in the very midst of a dry farming area.

It has not been a great many years since people were inclined to knock irrigation. In the days of the boom, when we were going to build cities of many thousands of population; when many land companies were selling land at high prices—even higher than they are now; when the incoming settlers were almost wholly from countries where they knew nothing about irrigation, it was not at all popular to talk about Southern Alberta as a country where irrigation was required. In those days the spread between irrigated land and dry land was not very great. That is a decade ago, or at least the early part of the last decade. Year after year the success of the two methods of farming has been demonstrated.

It was in 1914 that Mr. G. R. Marnoch, President of the Lethbridge Board of Trade, a man of long business experience and shrewd Scotch judgment, commenced the study of a method by which the city of Lethbridge and the surrounding country could best progress.

It did not take him very long to come to the conclusion that the one great thing for our citizens to do was to place that water running past their doors upon the lands. A few of us agreed with him from the first. A few of us knew that that was the proper thing for Southern Alberta. But, we foresaw all kinds of difficulties.

In the first place, the information we needed as to how much water was available and how much land could be brought under water was very meagre.

In the second place, we realized that the population was not experienced in irrigation and could not see the advantages. Many of the farmers themselves would not be in favor of the movement.

In the third place, we foresaw it would take a great deal of money and that it would require means of raising money that was not readily accessible to homestead farmers. Mr. Marnoch was not discouraged and took every possible opportunity of advocating the extension of irrigation.

We held some mass meetings in 1914. At these meetings we had the valuable assistance of Mr. W. H. Fairfield, who had been conducting experiments between dry farming and irrigation farming. Many of you have seen the reports and know what the results were. In those 1914 meetings certain localities made

up their minds that they required irrigation, while other localities imagined that people were trying to force something on them that they did not want. Then we had the great years of 1915 and 1916 and the marvellous crops produced in those years. Then came the years 1917, 1918, and 1919, and I may say probably the most effective force that has brought the farmers almost to a unity on this question of irrigation has been these dry years.

About a year ago the sentiment became manifest, but none of us apprehended to what extent the seed that had been planted in former years had taken root. It was not only the inhabitants of what we call the Lethbridge Northern project which had been fairly constant for irrigation, but we began to hear from the people in the South and South East and over at Monarch and Macleod and even to Pincher Creek all crying for irrigation, until we held a mass meeting in Lethbridge in the early spring and the auditorium was full of people there insistent upon the privileges of irrigation. It was at this meeting that the Irrigation Development Association was formed. It is a voluntary organization of farmers of the districts, irrespective of any particular project. It is a medium of expressing as I might say a practically universal demand. Its object is not to construct any one project. Not to foster any particular section, but to bring the most water that can possibly be obtained from the mountains and to extend it as far as possible over the South and in the most efficient manner.

We realized that it was not a question of one district grabbing water from another, and that in order to make the project a success we wanted no project except one that was fundamentally right; and in order to do that it meant the conservation of the entire water that was available and the application of it in the most efficient manner.

Now, I do not know of any body of men that has a more laudable purpose. It really means making this country in which we have come to live, a better place to live in. It means more than that. Did you ever think of the great countries on this continent—the great producing countries and think what part man has played in making them so?

I used to ride across the wonderful corn fields of Illinois. The land that is now worth \$400 and \$500 an acre. I remember the stories of my father when he first came through that country forty to fifty years ago. He told me that on the very prairies where the richest lands are now in Illinois, it was covered with sloughs and lakes and the waters of the prairie, and that the few inhabitants that were there were marked with malaria and chills and ague, and they lacked a great deal of being prosperous farmers. It was not until that land was drained and tilled, that it became productive. So you can look upon most of the great agricultural countries.

You remember the places where our fore-fathers cleared the forests and did very much more work than we have to do today, before the soil yielded its fruits. Southern Alberta is no exception to the rule.

Away back in the Scriptures we read that by the sweat of thy brow shalt thou reap. It was one of the fundamental conditions upon which the Creator made it possible for man to live and thrive and when He smoothed out this prairie in Southern Alberta; when He placed here a soil with practically no alkali in it; when He cut it with the coulees and provided means of drainage and when He placed the snow waters back at an elevation that it could be easily brought over the plains, He intended that some day here would be a prosperous and happy people engaged in the business of agriculture, but He also intended that before they could be prosperous and happy they should do their part and put the water on the land.

We have now had some ten or twelve years' experience in farming. I do not like to go back over those years and talk about the prosperous ones and the failures. I do not like to talk about the failures at any time. I do not want the irrigationist, or those who are standing for irrigation, to take any position or do any advertising that tends to knock the dry farmer, because after all, there is an enormous portion of this country that must always be farmed dry and there is a time coming when the dry farmer will have learned his soil and the conditions and the plants that will grow and the methods that he will follow which will make him a prosperous farmer. But, to us in Southern Alberta is given the greater part. We could get on the train in the Crows Nest Pass. We can ride all day, all night and all of another day across this prairie and we find much country that is similar. It is all a dry country. It would all be better if it could be irrigated, but, out of all that vast area of rich soil, the great expanse of the prairie, practically all the land that can be irrigated, that is if we do our part, lies in our portion of the province. Aside from that which has already plans provided for it under the C. P. R. systems, there is only some five or six hundred thousand acres of that land. It may sound big when you say five or six hundred thousand acres, but when compared with the rest of the area in this province it is an awfully small amount. But, that five or six hundred thousand acres in Alberta, and with the amount that now has plans for irrigation, we have the opportunity of being the greatest agricultural province in the Dominion.

It is not necessary for me to talk to you about the advantages of irrigation. Most of you men know the advantages. Why, even in a new country where land is abundant, the ratio between dry land and the irrigated land is something like four to one, and it is growing; and as the population becomes thicker and the demand for the products becomes greater, it will continue to spread and when you put the water on your land, you naturally increase its value five, six and even eight times or ten times.

But now, the question comes up, with this dry year following two other dry years, how are we going to get this water and get it on the land. How can we get it? In the first place, I want to answer that. We must get it. Did you ever think of the fact that as a province and a people we cannot go back? You have heard of the army that had advanced to such a place where it could not retire and had to go forward. That is the position that Alberta is in today. The Dominion government, yes, and the Provincial government have all encouraged the population of these lands. We have asked the good people to come and settle on the land and we have asked them to come and settle here making them to believe that they could be prosperous and construct homes and raise families upon this dry land without irrigation. We are responsible for the people being here in the first place. Now, those people have come, and I do not believe that any province or any state can brag of a better class, a more industrious or intelligent and patriotic class than the people of Southern Alberta. I do not believe that any other province has had a class of people with all things that go towards making good settlers that would excel the people of Southern Alberta. They have come here. They have built homes; they have built towns; they have built schools, churches and cities. They have put all they had in, and that does not merely mean their money, but they have put themselves into the country; and in doing this, they have contracted debts, not only debts individually but public debts. They owe for their schools. Our cities are not on a cash, but credit basis, and built on a credit basis. If you do not believe that, see what their bonded indebtedness is. They have advanced to the degree that they are now in. Many of them have come to the conclusion that if they had to live in a country where the government must send them food and seed and something to eat, they could not live there. They cannot be permanent. They

cannot stay there. If they do not stay there, what are we going to do? If the farmer leaves the land and he is leaving it to some extent, you have taken the whole foundation out of the whole thing, your cities fall and the bonds fall upon the heads of the few that remain. Is the province interested? How is the province going to progress unless it is through the labor of these people and the prosperity of the cities. The whole foundation drops. The burden that would remain upon those of us who were left would be so great that it would be very difficult to bear, so I say that we have come to a point where we must go ahead. We must advance, and we cannot advance as agriculturalists in Southern Alberta, unless we do that thing which the Creator evidently planned that we should do—put the water that is sweeping past our doors on our lands, supply the one missing factor that is necessary for our success. In Southern Alberta this is the one great question and that is the reason these farmers all over the province have volunteered and joined the association, because they realize that to obtain what they require is no small undertaking. They have a task before them.

Now, that brings us up to one question that it seems we have got to solve before we can get over. The Dominion government tells us that irrigation so far as they are concerned should end when they have completed their surveys and showed us the land that can be irrigated and the water available. Heretofore, there has been no real call except that of interest in the very vital question. There has been no real call for the provincial government to take hold of matters, but there is one thing necessary for us to succeed. We can unite and elect our best men to act as trustees and employ the most efficient engineer we can find. But, in order to sell the bonds at a figure that is satisfactory we must have the aid of either the Dominion or the Provincial government. There is where the question comes. Is this proposition of irrigation which is in one sense more or less local, but which in another sense reaches the prosperity of the entire province, is it such a question that the public credit of the Province or Dominion should be used for the purpose of guaranteeing the bonds. In the States in the early days most of the irrigation propositions were land company schemes or promoters' schemes. They differ from us in many respects. They were usually propositions intended to make certain companies wealthy. They usually contemplated bringing people to settle on the land and selling the land to them; and during some 25 years, or may be less than that, many of those schemes were not sound, or did not get enough lands sold, or did not have water, or did not have sufficient money to finance them; and thus they gave irrigation bonds a black eye. Following that era came the days when under President Roosevelt the Federal government conceived the idea that there was a duty to perform by the government, and they put in to operation those great government projects. Most of those involved lands were owned by the Federal government and were settled upon. The State of Oregon has projects under construction at the present time, and the State of Montana is as much alive to irrigation as Alberta and contemplates voting a bond issue of some \$30,000,000 for the purpose of putting water still available upon lands that are not yet irrigated.

We cannot hope that everybody will look upon this proposition from the standpoint of those of us who have seen irrigation and realize its importance. If that were possible I think that the big thing for our government and the real statesmanlike thing to do on the part of our Dominion would be to say, yes we own the water; we have shown those people where the water can be placed; how much land it can be placed on; we have induced those people to go there; we are going to see them through and put the water on their land. (Applause). But, it seems that our statesmen do not see our proposition that way. However, the Dominion government says that when we have our surveys completed we are through. If they continue to stand by that proposition, then the question comes home to us in Alberta. After all it is the Alberta people that are mainly interested.

VOICE: And some in Western Saskatchewan.

MR. DUNHAM: True. There is another aspect of the matter to be taken into consideration. Practically all the water flowing through Alberta can be taken advantage of by our brother irrigators in Saskatchewan. I have no hesitancy in saying that I believe our brothers in Saskatchewan would be glad of the opportunity we have in having this water available for putting on their land. But we now have the first chance. The plan of the Creator was evidently that it should be here. When you come to think about it, there is a warmer climate in the southern country making it warmer than in many places far to the south of us and open winters for stock; there can be no question but that this is or should be the finishing place for the live stock industry of the West.

If the Dominion government will not take the position that they should see the water placed on the land, are our people here going to turn a deaf ear to the opportunity to advance and progress and make stable the agricultural interests of the Province? I do not think the government will refuse. The responsibilities are not so onerous. I really know of no security that is better than an irrigated farm with a good irrigated farmer on it.

Some years ago I was in the loan business and in Southern Alberta I was instrumental in putting out a large sum of money, something like a million dollars. We could loan as high as \$1,500 on a quarter section of dry land, and strange to say few loan companies were loaning on irrigated land, first, because there was no irrigated farmer who would take a loan of \$1,500 on his irrigated farm, and, secondly, if he wanted more than that why it was against their rules to loan more. But the people I was working for, due to my persuasion permitted me to make loans as high as \$5,000 and \$6,000 a quarter. I made numerous loans like that near Coaldale. Since then I have been practising law in Southern Alberta and I know it is a common thing to see the foreclosure notices posted up on the Board of the Court House.

VOICE: In recent years?

MR. DUNHAM: Yes, even in recent years.

VOICE: Since 1914?

MR. DUNHAM: Yes, since 1914.

VOICE: We were assured here a week ago through our paper and Board of Trade sources that there was a moratorium in existence?

MR. DUNHAM: That applied only to soldiers. I have never seen a notice of a foreclosure of a mortgage on an irrigated farm. The security is good. The land without the water is equal almost to the amount, and in many cases more than the bonded indebtedness; and when you put the water on the land you multiply as much as by ten. So there is no risk in the security. Now that phase of the proposition is the most important part of the irrigation project. Today we have the people in those districts practically united; we have the land, we have the water, we are organizing as fast as we can, and we are coming up to that one proposition of finance, in some respects we would wait if we could. In some respects we might say that it would get down to a time when the cost of construction will not be so great, but our people cannot wait. They are there on the land, and they cannot stay there unless they get assistance. Only today, a government official told me that it may require some \$3,000,000 to carry the people over during the present crisis in this province, but I can say this that if that five or six hundred thousand acres of land was under irrigation in the southern part of the province, there would be none of that aid required. There would be a stability of our agricultural interests that would make it impossible for those conditions to



exist again in that part of the province. Irrigation not only improves the value of the land to which it is applied, but also the value of the dry land alongside of it. If there is an abundance of pasture and hay and all the conditions whereby the dry farmer can get his supplies and his labor right at his door, there can be no doubt but that his land would increase in value.

Now I think I have talked long enough but before I sit down I want to give notice that I am going to move a resolution that because of the continued dry seasons in Alberta a crisis has arisen in our progress. Irrigation is of such vital importance not only to the welfare of the people living upon the land, but to the whole province and to the Dominion that it justifies the use of the public credit for the purpose of guaranteeing the bonds of well considered irrigation projects. (Applause).

CHAIRMAN: Before I call upon the next speaker to follow up Mr. Dunham's subject, I will take it upon myself as Chairman to say a few words upon the lines that Mr. Dunham has addressed to you:

I think perhaps that Mr. Dunham has started a new epoch in the history of this convention. We have had twelve Conventions in the history of the Western Canada Irrigation Association and these Conventions have been mainly concerned in teaching the people of the country in general the benefits of irrigation. I think by this time the bulk of the people in Southern Alberta at any rate are fully aware of the benefits of irrigation and I am sure there is no doubt in their minds as to the feasibility of farming with irrigation as against the method of farming without irrigation. We have come now to a time when the question may safely be said to have been satisfactorily solved and the question we have to consider from now in this Association is not so much as to the desirability of irrigation in connection with farming as to the practise of irrigation wherever it is found possible and feasible. (Applause).

Last year, in Nelson, at our last Convention, there was some argument between Mr. Dunham and myself along with others, but I think Mr. Dunham and I were practically the chief speakers as to the place where this Convention was to be held in 1919, and I for the life of me cannot quite understand in the face of his impressive and eloquent address why he did not win out. At the same time, I think Mr. Dunham may perhaps agree with me that it is a good thing that this irrigation Convention came to Medicine Hat this year. In the Lethbridge country where they have had more practical demonstration of irrigation than we have had here, the people there are fully convinced not only of the benefits of irrigation, but of the necessity of employing every means, political and financial and otherwise, to obtain all the irrigation that can be practicable. While we in Medicine Hat who have not had the advantage of the practical demonstration that they have around Lethbridge may not be so convinced. After hearing Mr. Dunham and the other speakers, it will go a long way to proving to all people in this neighborhood the absolute necessity of practical irrigation wherever it will be found practicable.

I will now call upon Mr. J. Powelson, Raymond, Alberta, to speak on the subject of Mr. Dunham's address.

MR. POWELSON: I am glad, Mr. Chairman and gentlemen, to be here at this Convention to listen to the addresses and speeches of the other speakers. I would much prefer having remained as one of the audience. However, I am one who has had some experience in the south country and know the conditions existing throughout that country. In South Alberta we have one of the best irrigation districts found on the continent. I say that without reservation or without taking it back. Why do I make that statement? For this reason that, up to the time I



was 25 years of age—from the time I can remember assisting my brother in irrigation, and later taking the responsibilities of irrigation myself, to raise good crops we had to apply water. I lived then in the State of Utah, the pioneer state of irrigation.

In Alberta in 1903 we had more moisture than we knew how to get rid of. In 1904 I saw the first drought. We saw the land on which we had made every preparation for crops all drying up. Three of us went to a coulee and we diverted water from there on to our farm. We were late for the crop that year, but we produced the feed. I had plowed up 30 acres of land for the year 1905 and I knew what fall irrigation did in the South so I applied the water on the 30 acres I had plowed up in 1904. In 1905 it was another dry year, and I did not put any water on the land that year because the A. R. & I. Co. told us to let that coulee alone as it was their property, but before that company got next to us, as we say. I had raised 70 bushels of barley to the acre. That was all the crop I had in 1905, but that converted me to irrigation. In two dry years a crop was raised from a previous fall irrigation.

Another thing, we sow large areas of raw land after being broken up to wheat, and we see the seed bed covered with drifting soil. We have not the proper conditions for dry farming, but with irrigation there is sufficient by rotation of crops to put the fibres back by grasses and we can make it a success; and that is another reason why I am converted. We stand here today representing a large area of country and we are up against the proposition that in certain districts the surveys are made and the land is there and we have not used the river or considered storage of water, but it has been demonstrated that large areas can be irrigated by holding the rivers back. It is up to this Association to see that the governments, whether provincial or federal, back us to carry on these projects. The water supply is here. We do not need to put in our time and attention converting people to irrigation but we must as a Convention assembled here today act in such a way that we can receive the benefit of the surveys already made so that we will not have to go to the government as we did in 1914 and get \$12,000,000 from them. We have now three dry years again out of five. It is a shame for any people to be in that condition. May we as a Convention assembled here so act so that we can bring our resources into effect so that we can look forward to the future when we can apply our own resources. I feel like seconding the resolution drawn up by Mr. Dunham. I thank you. (Applause.)

DELEGATE: Supposing you could have got your water on the land in the Spring instead of the Fall, would you have had as good a crop as you would have by the fall irrigation method?

MR. POWELSON: I would say that I would prefer fall irrigation to spring irrigation, because when the moisture is in the land your seed gets an early start. Whether it rains or not, grain that has plenty of moisture will do better than grain that has to wait for the moisture to come.

DELEGATE: Supposing your spring water came from snow you would get no advantage of early growth?

MR. POWELSON: By fall irrigation I can get on the land as soon as I can and plant my crop. Generally the ground is frozen and the snow runs off, but if you get fall irrigation the moisture goes right down. Of course I do not think that the work a farmer would go to in storing up water in a coulee would go so far as where a community took the water direct from the river and distributed it throughout the district.

CHAIRMAN: Mr. Powelson spoke about the dry years of 1904, 1905 and 1906. Can many of you remember the dry years between 1887 and 1897 when the rainfall did come in the right time even if there was not sufficient? I think that is a pretty good answer to the cry for irrigation wherever we can get it. Is there any other gentlemen who would like to say a few words on this subject?

MR. PEARCE: In the first place I want to emphasize what Mr. Dunham has said about the value increasing of dry land adjoining irrigated land. There is no doubt that every acre of dry land has from 100 to 150 per cent. added to its value by reason of lying in the vicinity of irrigated lands. That is a point that all good authorities have agreed upon. That is some authorities go to say that one acre of irrigated land doubles the value of seven acres of non-irrigated land. In any project of extensive irrigation the whole country will be benefited to a marked degree, not merely the irrigated lands.

There is another subject I would like to mention. There are irrigation propositions that have been mooted as practicable, embracing a large portion of Saskatchewan. There is a proposition before the government to make certain surveys and if they turn out as I think they will—and I have studied the question as much as most of the people and know the country well—there are 13 millions of acres in Saskatchewan that will be greatly benefited by irrigation. The water is available as far as it will go. That is the North Saskatchewan River. There are 9,000,000 acres of land that can be irrigated and the balance can be rendered more valuable by reason of stock watering privileges, which will follow irrigation; or you may take stock watering first, and take the irrigation as secondary. So that we should not confine the problem of irrigation to Alberta.

There is another proposition for which surveys were already made as far back as 1903-1905, which demonstrated that the waters of the Red Deer River could be taken out and put on land of over 1,000,000 acres in extent. There is not enough water in the river to irrigate all that million acres, but the value of a million acres would be increased.

I want to point out that in irrigation districts the lands that will be benefited by irrigation do not lie within the common definition of Southern Alberta. I want to emphasize the fact that irrigation interest created in Saskatchewan and North of what we might call the Lethbridge district would not militate against the scheme, but rather improve it. The more people you get interested in it, the more public opinion you will have behind it to carry out your proposals.

MR. J. S. ANDERSON: I have been living in the South some time. The other night I was speaking to the new bank manager in our town who had been rather sceptical about irrigation. He said he had loaned a lot of money to people the previous spring and every person with one exception who had water was able to pay this fall, but he knew of only a few in the district who have no water that would be able to make a small payment and in most cases none at all, would be forthcoming. He said he was now a firm believer in irrigation.



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